

September 18, 1999

Mr. Larry Gadbois
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, WA 99352



Dear Mr. Gadbois:

RE: Response to February 25, 1999 Letter Regarding K Basins M-34 Milestones

50343

Dear Mr. Gadbois:

Thank you for your response to my follow-up comment letter. In relation to my concerns about the current environmental insult occurring from leakage of the K Basins, you state "the EPA does not view the questions and challenges in your letter as providing basis for changes in the remedial strategy set forth in the M-34 milestone package." It appears you misunderstood my requests. For clarification, I offer that I did not propose any changes to the M-34 milestone package, but rather an expansion of scope. In other words, while you promote addressing only the source of contamination, I am a proponent of addressing the source as well as the mobile vadose, groundwater, and surface water contamination.

Your letter accurately describes the M-34 milestone change control proposal as action oriented. Where we disagree is that M-34 only addresses stabilization of the basins and attempts neither to characterize the nature of the contamination nor to prevent contamination migration (i.e., needed administrative controls are not included in the change package). As such, it is still my conclusion that the M-34 milestone change package does not satisfy the most fundamental applicable or relevant and appropriate standards, limitations, criteria, and requirements (ARARs) as required under CERCLA. Specifically, the Resource Conservation and Recovery Act (RCRA) would classify the K Basins as surface impoundments. As such, groundwater monitoring requirements would be applicable. Due to the known releases and significant vadose and groundwater contamination, at the very least, groundwater monitoring as well as certain administrative controls are applicable, relevant and appropriate at this time and appropriate for the safe and environmentally sound management of the basins. In fact, if the basins were considered RCRA units, corrective action requirements would be imposed due to the known releases. RCRA places the highest priority on addressing releases that go beyond a facility's boundary. In this case, it is clear the most fundamental RCRA ARARs are simply not being addressed. Your response that the ARARs will be addressed in the distant future is entirely unsatisfactory.

Therefore, your February 25, 1999 letter erroneously interprets my position to be focused on achieving "remediation of this geographic area". While my position may ultimately support "remediation of this geographic area," my immediate concerns are directly related to the current and continuing environmental insult (vadose/groundwater/surface water contamination). Your letter also states "the single best remedial action we can do

to address the issues you highlight is to conduct the work directed by the M-34 change package." While your statement has considerable merit, the implication that this tremendous environmental issue only deserves a "single" remedial action at this time is not warranted. The basins negatively impact multiple medias and pathways and as such, the fundamental ARARs associated with vadose, groundwater and/or surface water monitoring should be included with the remedial actions of M-34. The source is not the entire problem, although it currently yields the greatest risk. Therefore, I request the following:

1. Groundwater monitoring analyses be reported by EPA to me, in writing, on an annual basis for the following wells: K-13, K-18, K-106A, K-107A K-108A, K-109A, K-110A, K-111A, K-27, K-28, K-29, K-30, K-32A, and K-34. The RCRA groundwater monitoring requirements of 40 CFR 265 (by reference of WAC 173-303-400) require quarterly monitoring. In addition, several of the above identified wells do not appear to have a quarterly, semi-annual or even annual sampling schedule for constituents of concern (chromium, lead, nitrate, technetium-99, strontium-90, etc.).
2. K Area shoreline and river seep monitoring analyses be reported by EPA to me, in writing, on an annual basis. Such seep monitoring should be done during low river stages and the river levels at the time of sampling should be reported with the above requested analyses. It should also be noted that RCRA groundwater contamination assessment requirements of 40 CFR 265 (by reference of WAC 173-303-400) require the determination of rate and extent of contaminant migration. Again, constituents of concern should, at a minimum, include the following: chromium, lead, nitrate, technetium-99, and strontium-90.
3. A written status of the groundwater pump and treat system (which began in 1995) to extract chromium from groundwater in the KR-4 operable unit. The status must be provided by EPA and not reference documents that may not be easily accessed by the concerned public.
4. A written description of all administrative controls in place to prevent water, liquids, and/or liquid waste to be placed on or discharged to the 100-K Area surface (i.e., to prevent such contamination transport as may have occurred due to liquid management by the Hanford Fire Department personnel). In addition, please provide an identification of the appropriate procedure numbers with your description. Again, the description(s) must be provided with the response rather than referencing documents that may not be easily accessed by the public.
5. A written description of the groundwater monitoring plan which will be implemented to detect basin leakage during remedial actions being taken to remove fuel rods, water and/or sludge or to add anything which may displace liquids/sludges currently in the basins. These actions are in agreement with actions being taken by the Office of River Protection and its Tank Waste

Remediation Program that will monitor the vadose zone during single shell tank waste retrieval actions.

As it is EPA's position that monitoring, contamination characterization, etc. is beyond the applicable, relevant, and/or appropriate scope of the M-34 milestone change package, I have requested the above information in an attempt to persuade you of the value and importance of understanding and monitoring this environmental contamination. As you know, the Spent Nuclear Fuel project at the K Basins has experienced numerous delays and budget overruns. Even if there are no more delays associated with the M-34 remedial actions, several years will have passed before the contamination associated with the basins will be addressed by the implementation of a CERCLA Record of Decision. If the contamination associated with the basins' management and future M-34 activities is not addressed as soon as possible, important ARARs not satisfied could negatively impact sensitive ecological habitats.

I would also like to take this opportunity to address another issue associated with your February 25, 1999 letter. In the first paragraph of your letter, you state: "It is also evident that you fundamentally disagree with USDOE, EPA, and your management at Ecology...". It appears that I must again remind you that I commented on the TPA M-34 milestone change package as a private citizen exercising her legal right to comment publicly on proposed Federal activities. Because your responses to my requests and concerns have been inadequate, inaccurate and/or generally non-responsive, it was necessary to request the additional information itemized above. Whether or not I am an employee of the Washington State Department of Ecology has no bearing on your response to my requests and concerns. It is both inappropriate and unprofessional of you to have included this information in your response. Indeed, on February 18, 1999 when you contacted me by telephone at work, I explained it was inappropriate to discuss this issue while at work as I had provided comment not as an employee of the Department of Ecology but as a private citizen. As you recall, I provided my home telephone number and identified when I would be available to discuss this issue. As a result, you called me at home that same day, at which time we discussed my comments and requests. I believe I could not have made it clearer that I was acting as a private citizen exercising her legal right to comment publicly on proposed government activities. Furthermore, whether or not I agree with the management of the Washington State Department of Ecology is irrelevant to the issues at hand. Perhaps you do not realize, but my job duties with Ecology have never involved the K-Basins and, therefore, I have not provided input to my management on K-Basin issues. The inappropriateness of EPA's response continued as no less than three Department of Ecology managers were copied on the response. Therefore, I must insist that this inappropriate behavior stop and that all future correspondence clearly identify my concerns as the interests of a private citizen.

In addition, I request an explanation of the peer review process implemented for your February 25, 1999 letter. Specifically, I would like to know if your letter was peer reviewed or reviewed for approval by your management prior to your response. I would certainly hope your management would recognize the inappropriateness and lack of professionalism associated with your publicly voiced conclusions quoted above.

I would also like to take this opportunity to address another issue associated with your February 25, 1999 letter. In the second paragraph of your letter, you acknowledge an assessment plan entitled "Groundwater Monitoring and Assessment Plan for the 100-K Area Fuel Storage Basins" (WHC-SD-EN-AP-174, Rev. 0). Your letter states: "In fact the groundwater monitoring and evaluation prescribed in that plan was implemented...". It is my understanding that the approach as prescribed by Sections 3.3.2 and 3.5.3 of the document (section titles respectively, "Additional Near-Field Groundwater Characterization" and "Rationale for Subsurface Characterization Borehole Locations") was not implemented. Specifically, the following prescription is taken from Section 3.3.2 of the document:

"Additional exploration borings would be needed to determine the cause of the strontium-90 identified in groundwater from well K-109A (located approximately 23 m [75 ft] from the northeast corner of the KE Basin). If strontium-90 is also present between the subject well and the basin, then breakthrough and lateral transport from the construction joint, and/or from transfer lines and the sub-basin drainage collection box located between the transfer lines and the sub-basin drainage collection box located between the basin and well K-109A, are indicated. If strontium-90 is not encountered at these locations, past-practice sources such as French drains in the upgradient vicinity of well K-109A are likely sources. Installation of these boreholes should proceed in a "discovery" mode: install, collect groundwater samples, use quick turnaround or field screening analyses (spectral gamma logging and/or field liquid scintillation counting [LSC] of water samples), and then make a decision about the need for and/or location of subsequent borings."

In addition, Section 3.5.3 describes the prescription further by the following:

"The approach involves installing drive points sequentially in key locations. Each point would involve analysis of a water sample in the field and/or spectral gamma logging to detect either strontium-90 bremsstrahlung radiation or the 0.66 MeV photon from cesium-137. If significant activity is detected, the decisions for the next key location would be drilled as illustrated in Figures 3-9 and 3-10. Approximately five such locations are considered adequate to at least narrow down the potential source areas. The collection points would be left in place for at least 1 year to allow for confirmatory evaluation."

It is my understanding that not even one drive point was installed even though five were prescribed as a minimum. Your February 25, 1999 letter's assertion that "the groundwater monitoring and evaluation prescribed in that plan was implemented" is simply inaccurate. I request an explanation of these particular deviations between prescribed and implemented actions. Furthermore, it is my assertion that the cause of the strontium-90 identified in groundwater well K-109A remains unknown. This assertion is

supported by the recommendations contained in a subsequent document you referenced in your letter entitled "Groundwater Monitoring for the 100-K Area Fuel-Storage Basins: July 1996 Through April 1998" (October 1998, PNNL-12023). As such, I also want to know if there is any intention of implementing the recommendations contained in this document. If so, I request an explanation of which recommendations will be implemented and which will not. Please include the technical justification for these determinations.

Yet another issue regarding your February 25, 1999 letter is your reference to a document entitled "Groundwater Monitoring for the 100-K Area Fuel Storage Basins: July 1996 Through April 1998" (PNNL-12023, October 1998). Your letter states: "Your Ecology co-worker Stan Leja was on distribution for this document." As discussed above, your reference to my place of employment was inappropriate and unprofessional. Similarly, your identification of Stan Leja as being my co-worker and on distribution for this information was inappropriate. To explain, you provided neither a copy of the document nor provided an explanation where it could be obtained. Your letter appears to assume I would have access to this document simply by virtue of being employed by the Department of Ecology. To the contrary, on September 3, I made a public disclosure request and was informed by letter dated September 7 (see copy enclosed) that the document I requested "is not available from the Washington State Department of Ecology." Similarly, on September 9, I sent an electronic mail message to Mr. Leja requesting clarification whether or not he had received the referenced document. Mr. Leja verbally responded on September 9, indicating he had not. Therefore, I recommend that in the future, you not assume the public has access to the documents you reference. It is, in part, for this reason that the above statuses and summaries have been requested to be provided by EPA. A list of references that may be difficult to obtain does not satisfy the comment and request and must be discontinued.

Yet another issue regarding your February 25, 1999 letter is your response to my request of all documentation of the decision-making process whereby the vadose, groundwater, and surface water characterization and/or remediation were omitted from the work scope of the M-34 change package. Your letter, for the third time, inappropriately refers to my "co-workers". More importantly, your response suggests even the lead EPA representative does not appear to have documentation of the decision-making process. Your letter identifies that "some of the discussions are captured in meeting minutes recorded by USDOE and their contractors". I repeat my request for a copy of documentation supporting the decision-making process whereby the vadose, groundwater, and surface water characterization and/or remediation were omitted from the work scope of the M-34 change package. I trust I need not explain that as the lead EPA representative, it is your responsibility to ensure that such documentation is produced and entered into the administrative record that ultimately supports your decisions. In addition, it was inappropriate of you to refer me to individuals who do not represent your agency. Your letter also describes a discussion in a document entitled "Remaining Sites" Proposed Plan. I request EPA provide a copy of this document. It is inappropriate in a response to public comments to assume that the public has access to such documents.

cc w/ enclosures:

Chuck Clarke, Region X, EPA
Tom Fitzsimmons, Department of Ecology
Keith Klein, USDOE Richland Operation Office
Merilyn Reeves, Hanford Advisory Board
Governor Mike Locke
Hanford Site Administrative Record